Filed 9/7/23

CERTIFIED FOR PARTIAL PUBLICATION*

IN THE COURT OF APPEAL OF THE STATE OF CALIFORNIA

THIRD APPELLATE DISTRICT

(Sacramento)

TSAKOPOULOS INVESTMENTS, LLC, Plaintiff and Appellant, v. COUNTY OF SACRAMENTO et al., Defendants and Respondents; MATHER SOUTH, LLC, et al., Real Parties in Interest and Respondents.	C095631 (Super. Ct. No. 34-2020-80003341-CU-WM-GDS)

APPEAL from a judgment of the Superior Court of Sacramento County, Laurie M. Earl, Judge. Affirmed.

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* Pursuant to California Rules of Court, rules 8.1105 and 8.1110, this opinion is certified for publication with the exception of parts II and III of the Discussion.

Jeffer Mangels Butler & Mitchell, Kerry Shapiro, Matthew David Hinks and Seena M. Samimi for Plaintiff and Appellant.

Lisa A. Travis, County Counsel, June R. Powells-Mays, Deputy County Counsel; Monchamp Meldrum, Amanda Jean Monchamp and Joanna Meldrum for Defendants and Respondents.

Monchamp Meldrum, Amanda Jean Monchamp and Joanna Meldrum for Real Parties in Interest and Respondents.

Plaintiff Tsakopoulos Investments, LLC (Tsakopoulos) filed a petition for writ of mandate and a complaint for declaratory and injunctive relief (petition) against defendants the County of Sacramento (County) and the Sacramento County Office of Economic Development and Marketing, challenging the County's approval of a project known as the Mather South Community Master Plan (the project) under the California Environmental Quality Act (CEQA; Pub. Resources Code,[1] § 21000 et seq.). The trial court denied the petition and entered judgment in favor of defendants. Tsakopoulos appeals.

Tsakopoulos asserts we should reverse the judgment because the final environmental impact report (final report) is deficient in three respects: (1) the climate change analysis was based on a methodology that our Supreme Court in *Center for Biological Diversity v. Department of Fish & Wildlife* (2015) 62 Cal.4th 204 (*Center for Biological Diversity*) and the Fourth District Court of Appeal in *Golden Door Properties, LLC v. County of San Diego* (2018) 27 Cal.App.5th 892 (*Golden Door Properties*) previously rejected as unsupported by substantial evidence; (2) the County "failed to assess the impacts from construction-related greenhouse gas emissions" in its climate

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[1] All further section references are to the Public Resources Code unless otherwise specified.

change analysis; and (3) the County "failed to analyze the human health impacts associated with the" project's emissions from criteria pollutants.[2] (Boldface omitted.)

In the published portion of the Discussion, we explain why the County's climate change analysis was not previously rejected by our Supreme Court or the Fourth District Court of Appeal for lack of substantial evidence. In the unpublished portion of the Discussion, we find Tsakopoulos has presented no meritorious contentions to challenge the County's construction-related and human health impacts analyses. We thus affirm.

FACTUAL AND PROCEDURAL BACKGROUND

For the reader's ease, we provide a summary of the general factual and procedural background here and include the pertinent facts as to each issue in the applicable portion of the Discussion.

The project site consists of approximately 848 acres and is located in the County. The project "is one of four major planning applications currently in process for future urban growth areas located along the Jackson Road corridor, which are collectively referred to as the Jackson Highway Master Plans." If built, the project "would result in up to 3,522 residential dwelling units of various densities," "a 28-acre environmental education campus including 200 multi-family dwelling units, a 21-acre research and development park, two elementary schools, a 6-acre community center, 21 acres of commercial-retail with up to 225,000 square feet . . . of retail space, 44 acres of parkland," "and 157 acres of open space areas." The project requires a host of approvals to permit the project's physical development, including several general plan amendments,

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[2] "Criteria pollutant" is defined by federal regulations as "a pollutant for which the Administrator [of the United States Environmental Protection Agency] has promulgated a national ambient air quality standard pursuant to 42 U.S.C. 7409 (i.e., ozone, lead, sulfur dioxide, particulate matter, carbon monoxide, nitrogen dioxide)." (40 C.F.R. § 52.31(b)(4).)

a special plan amendment, a zoning ordinance amendment, and adoption of a development agreement.

The County is the lead agency for the project and its Office of Economic Development and Marketing owns the property on which the project will be developed. Real party in interest Mather South, LLC, is the project applicant and holds the rights to develop the project pursuant to a purchase and sale agreement with the County.

Mather South, LLC, filed the project application in 2013. The County released the notice of preparation of an environmental impact report in June 2014, and revised the notice in January 2017 due to substantial changes to the project's land use plan. The draft environmental impact report was released on January 8, 2019, and, after several public hearings, the County published the final report for the project on January 17, 2020. Following a public hearing on January 28, 2020, the County certified the final report and approved the project. The County also adopted CEQA findings of fact, a statement of overriding considerations, and a mitigation monitoring and reporting program.

Tsakopoulos filed the petition challenging the County's certification of the final report and approval of the project. Tsakopoulos asserted several violations of CEQA, all of which the trial court determined were unfounded. Tsakopoulos appeals.

DISCUSSION[3]

" 'The foremost principle under CEQA is that the Legislature intended the act "to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language." ' [Citations.] 'With narrow exceptions, CEQA requires an [environmental impact report] whenever a public agency proposes to approve or to carry out a project that may have a significant effect on

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[3] Defendants and real parties in interest filed a joint respondent's brief in this appeal. When we refer to the County's arguments in this opinion, we refer to the arguments made in the joint brief.

the environment.' " (*Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502, 511 (*Friant Ranch*).) A project will have a significant effect on the environment if it will cause "a substantial, or potentially substantial, adverse change in" "the physical conditions [that] exist within the area [that] will be affected by [the] project, including land, air, water, minerals, flora, fauna, noise, [and] objects of historic or aesthetic significance." (Guidelines[4]; §§ 21060.5 [defining "environment"], 21068 [defining "significant effect on the environment"].)

"The basic purpose of an [environmental impact report] is to 'provide public agencies and the public in general with detailed information about the effect [that] a proposed project is likely to have on the environment; to list ways in which the significant effects of such a project might be minimized; and to indicate alternatives to such a project.' [Citations.] 'Because the [environmental impact report] must be certified or rejected by public officials, it is a document of accountability. If CEQA is scrupulously followed, the public will know the basis on which its responsible officials either approve or reject environmentally significant action, and the public, being duly informed, can respond accordingly to action with which it disagrees.' [Citation.] The [environmental impact report] 'protects not only the environment but also informed self-government.' [Citation.]

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[4] References to the "Guidelines" are to the regulations for the implementation of CEQA codified in title 14, section 15000 et seq. of the California Code of Regulations, which have been developed by the Office of Planning and Research and adopted by the Secretary of the Natural Resources Agency. (§ 21083.) The Guidelines are statutorily mandated to provide "criteria for public agencies to follow in determining whether or not a proposed project may have a 'significant effect on the environment.' " (§ 21083, subd. (b).) "We give the Guidelines great weight in interpreting CEQA, except where they are clearly unauthorized or erroneous." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 217, fn. 4.)

"The standard of review in a CEQA case, as provided in sections 21168.5 and 21005, is abuse of discretion. Section 21168.5 states in part: 'In any action or proceeding . . . to attack, review, set aside, void or annul a determination, finding, or decision of a public agency on the grounds of noncompliance with this division, the inquiry shall extend only to whether there was a prejudicial abuse of discretion.' [Citation.] Our [Supreme Court's] decisions have thus articulated a procedural issues/factual issues dichotomy. '[A]n agency may abuse its discretion under CEQA either by failing to proceed in the manner CEQA provides or by reaching factual conclusions unsupported by substantial evidence. [Citation.] Judicial review of these two types of error differs significantly: While we determine de novo whether the agency has employed the correct procedures, "scrupulously enforc[ing] all legislatively mandated CEQA requirements" [citation], we accord greater deference to the agency's substantive factual conclusions. In reviewing for substantial evidence, the reviewing court "may not set aside an agency's approval of an [environmental impact report] on the ground that an opposite conclusion would have been equally or more reasonable," for, on factual questions, our task "is not to weigh conflicting evidence and determine who has the better argument." ' " (*Friant Ranch*, *supra*, 6 Cal.5th at pp. 511-512, fn. omitted.)

"[W]hether an agency has followed proper procedures is not always . . . clear. This is especially so when the issue is whether an [environmental impact report's] discussion of environmental impacts is adequate, that is, whether the discussion sufficiently performs the function of facilitating 'informed agency decisionmaking and informed public participation.' " (*Friant Ranch*, *supra*, 6 Cal.5th at p. 513.) When we assess a claim of inadequate discussion, "[t]he inquiry presents a mixed question of law and fact. As such, it is generally subject to independent review. However, underlying factual determinations—including, for example, an agency's decision as to which methodologies to employ for analyzing an environmental effect—may warrant deference. [Citations.] Thus, to the extent a mixed question requires a determination whether

statutory criteria were satisfied, de novo review is appropriate; but to the extent factual questions predominate, a more deferential standard is warranted." (*Id*. at p. 516.)

I

The Methodology Used To Develop The Climate Change Significance Thresholds Has Not Been Rejected For Lack Of Substantial Evidence

Tsakopoulos challenges the methodology underlying the greenhouse gas thresholds of significance adopted by the County. A decision to use a particular methodology and reject another is reviewed for substantial evidence. (*Friant Ranch*, *supra*, 6 Cal.5th at p. 514.) Tsakopoulos asserts the County's climate change analysis lacks substantial evidence because the County employed a methodology previously rejected by our Supreme Court in *Center for Biological Diversity* and the Fourth District Court of Appeal in *Golden Door Properties*. We disagree.

We initially set out the pertinent factual background regarding the statewide greenhouse gas reduction targets and discuss Guidelines section 15064.4, which pertains to determining the significance of impacts from greenhouse gas emissions. We next set forth the holdings and analyses from the two cases that Tsakopoulos relies upon and summarize the information in the record pertaining to the County's methodology. Finally, we conclude the County did not use a methodology that was previously rejected for lack of substantial evidence.

A

Statewide Greenhouse Gas Reduction Targets

"In June 2005, Governor Schwarzenegger signed Executive Order No. S-3-05" (2005 Executive Order), "which set overall greenhouse gas emissions reduction targets for California. [Citation.] The [2005] Executive Order established three general benchmarks: (1) reduce emissions to 2000 levels by 2010; (2) reduce emissions to 1990 levels by 2020; and (3) reduce emissions to 80 percent below 1990 levels by 2050. These targets were based on a scientific consensus that climate change was largely caused by

human activity resulting in elevated levels of carbon dioxide and other heat-trapping gases in the atmosphere and that drastic reductions in greenhouse gas emissions were required to stabilize the climate." (*Cleveland National Forest Foundation v. San Diego Assn. of Governments* (2017) 3 Cal.5th 497, 504.)

"In 2006, shortly after the [2005] Executive Order was issued, the Legislature enacted the California Global Warming Solutions Act of 2006 (Stats. 2006, ch. 488, [§ 1,] p. 3419, adding Health & Saf. Code, § 38500 et seq.), commonly known as Assembly Bill No. 32 (2005-2006 Reg. Sess.)" (Assembly Bill 32). (*Cleveland National Forest Foundation v. San Diego Assn. of Governments*, *supra*, 3 Cal.5th at p. 505.) In Assembly Bill 32, "our Legislature emphatically established as state policy the achievement of a substantial reduction in the emission of gases contributing to global warming. [Citations.] More specifically, Assembly Bill 32 calls for reduction of such emissions to 1990 levels by the year 2020. [Citation.] The law designates the State Air Resources Board (the Air Board) as the state agency charged with regulating greenhouse gas emissions [citation] and calls for the Air Board to coordinate with other state agencies to implement the state's reduction goal [citation].

"Under Assembly Bill 32, the Air Board was required to determine as accurately as possible the statewide level of greenhouse gas emissions in 1990 and to approve on that basis a statewide emissions limit to be achieved by 2020. [Citation.] The Air Board was required to prepare and approve by January 1, 2009, a 'scoping plan' for achieving the 'maximum technologically feasible and cost-effective' reductions in greenhouse gas emissions by 2020." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at pp. 215-216.)

"In its 2008 Climate Change Scoping Plan" (2008 Scoping Plan), "the Air Board explained that '[r]educing greenhouse gas emissions to 1990 levels means cutting approximately 30 percent from business-as-usual emission levels projected for 2020, or about 15 percent from today's levels.' [Citation.] The [2008] Scoping Plan then set out a 'comprehensive array of emissions reduction approaches and tools' to meet the goal,

including expanding energy efficiency programs, achieving a statewide renewable energy mix of 33 percent, developing with our regional partners a cap-and-trade program for greenhouse gases, establishing targets and policies for emissions in transportation and implementing existing clean transportation programs, and creating targeted fees on certain activities affecting emissions." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 216.)

"The Air Board had previously identified a year 2020 annual emissions limit, equal to its estimate of statewide 1990 emissions, of 427 million metric tons of carbon dioxide equivalent . . . . [Citation.] In the [2008] Scoping Plan, the board estimated emissions by economic sector in the period 2002 to 2004, finding they totaled 469 [million metric tons of carbon dioxide equivalent] annually. Those annual emissions were then projected forward to the year 2020, employing population and economic growth estimates, yielding a business-as-usual figure of 596 [million metric tons of carbon dioxide equivalent]. [Citation.] The target of 427 [million metric tons of carbon dioxide equivalent] is about 29 percent below the 2020 forecast of 596 [million metric tons of carbon dioxide equivalent], giving the Air Board the 30 percent reduction goal quoted earlier.

"The [2008] Scoping Plan's 2020 forecast is referred to as a 'business-as-usual' projection because it assumes no conservation or regulatory efforts beyond what was in place when the forecast was made. It 'represent[s] the emissions that would be expected to occur in the absence of any . . . [greenhouse gas] reductions actions.' [Citation.] For example, the emissions forecast for electricity generation assumes 'all growth in electricity demand by 2020 will be met by in-state natural gas-fired power plants' and the estimate for on-road vehicle emissions 'assumes no change in vehicle fleet mix over time.' [Citation.]

"Neither Assembly Bill 32 nor the Air Board's [2008] Scoping Plan set out a mandate or method for CEQA analysis of greenhouse gas emissions from a proposed

project. A 2007 CEQA amendment, however, required the preparation, adoption and periodic update of guidelines for mitigation of greenhouse gas impacts." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at pp. 216-217.)

"In 2015, the Governor signed Executive Order B-30-15" (2015 Executive Order) "to establish a state greenhouse gas reduction target of 40 percent below 1990 emissions levels by 2030. The Governor's new target would make it possible for the state to reach the ultimate goal of reducing emissions to 80 percent below 1990 levels by 2030." (*League to Save Lake Tahoe v. County of Placer* (2022) 75 Cal.App.5th 63, 109.) Senate Bill No. 32 (2015-2016 Reg. Sess.) (Senate Bill 32) codified the 2015 Executive Order. (See Health & Saf. Code, § 38566, added by Stats. 2016, ch. 249, § 2 ["In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the [Air Board] shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030"].)

In 2017, the Air Board adopted an updated Scoping Plan. The Air Board provided guidance "[t]o support local governments in their efforts to reduce [greenhouse gas] emissions." (Air Bd., California's 2017 Climate Change Scoping Plan: The strategy for achieving California's 2030 greenhouse gas target (Nov. 2017) ch. 5, p. 99 (2017 Scoping Plan).) For "local plan-level greenhouse gas emissions reduction goals" (capitalization & boldface omitted), the Air Board "recommend[ed] that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the [s]tate's sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the [s]tate's 1990 emissions limit established under [Assembly Bill] 32." (*Id*., pp. 99-100.) The Air Board noted "[n]umerous local governments in California have already adopted [greenhouse

gas] emissions reduction goals for year 2020 consistent with [Assembly Bill] 32" and "advise[d] that local governments also develop community-wide [greenhouse gas] emissions reduction goals necessary to reach 2030 and 2050 climate goals. Emissions inventories and reduction goals should be expressed in mass emissions, per capita emissions, and service population emissions." (*Id*., p. 100.)

The Air Board explained, "To do this, local governments can start by developing a community-wide [greenhouse gas] emissions target consistent with the accepted protocols as outlined in [the Office of Planning and Research's] General Plan Guidelines Chapter 8: Climate Change. They can then calculate [greenhouse gas] emissions thresholds by applying the percent reductions necessary to reach 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to their community-wide [greenhouse gas] emissions target. Since the statewide per capita targets are based on the statewide [greenhouse gas] emissions inventory that includes all emissions sectors in the [s]tate, it is appropriate for local jurisdictions to derive evidence-based local per capita goals based on local emissions sectors and population projections that are consistent with the framework used to develop the statewide per capita targets. The resulting [greenhouse gas] emissions trajectory should show a downward trend consistent with the statewide objectives. The recommendation for a community-wide goal expands upon the reduction of 15 percent from 'current' (2005-2008) levels by 2020 as recommended in the 2008 Scoping Plan." (2017 Scoping Plan, *supra*, ch. 5, p. 100, fn. omitted.)

The Air Board also discussed "project-level greenhouse gas emissions reduction actions and thresholds." (2017 Scoping Plan, *supra*, ch. 5, pp. 101-102, capitalization & boldface omitted.) The Air Board "recommend[ed] that projects incorporate design features and [greenhouse gas] reduction measures, to the degree feasible, to minimize [greenhouse gas] emissions." (*Id*., p. 101.) The Air Board further stated, "Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per

capita, or per service population) consistent with this Scoping Plan, the [s]tate's long-term [greenhouse gas] goals, and climate change science." (*Id*., p. 102.)

B

The Guideline For Determining The Significance Of Impacts From Greenhouse Gas Emissions

"In 2010, the Natural Resources Agency adopted a new CEQA guideline on determining the significance of impacts from greenhouse gas emissions." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 217.) Guidelines section 15064.4, subdivision (a) requires a lead agency to "make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine in the context of a particular project, whether to: [¶] (1) [q]uantify greenhouse gas emissions resulting from a project; and/or [¶] (2) [r]ely on a qualitative analysis or performance based standards." (Guidelines, § 15064.4, subd. (a).)

Guidelines section 15064.4, subdivision (b) provides "that when assessing the significance of greenhouse gas emissions, the agency should consider these factors among others: '(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; [¶] (2) [w]hether the project emissions exceed a threshold of significance that the lead agency determines applies to the project[;] [¶] (3) [t]he extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such requirements must be adopted by the relevant public agency through a public review process and must reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements,

an [environmental impact report] must be prepared for the project.' " (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 217.)

Guidelines section 15064.4, subdivision (c) provides: "A lead agency may use a model or methodology to estimate greenhouse gas emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use."

C

Summary Of The Cases Upon Which Tsakopoulos Relies

In *Center for Biological Diversity*, our Supreme Court considered, among other things, whether the lead agency's determination that a project's estimated greenhouse gas emissions would not have a significant environmental impact was supported by substantial evidence in the administrative record. (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 218.) In the pertinent environmental impact report, the lead agency disclosed "the project's likely increase in emissions over the existing environment, informing the reader that the project w[ould] increase greenhouse gas emissions by 269,053 [metric tons of carbon dioxide equivalent] compared to the existing environmental setting [citation], but decline[d] to consider the impact significant based on the size of that increase alone 'because of the absence of scientific and factual information regarding when particular quantities of greenhouse gas emissions become significant.' As for a significance threshold [citation], the [lead agency] assert[ed] that no agency had adopted an applicable threshold." (*Id*. at p. 222.)

The lead agency next considered " 'whether the proposed [p]roject's emissions . . . would impede the State of California's compliance with the statutory emissions reduction mandate established by [Assembly Bill] 32," which was "modeled on the Air Board's

use, in its [2008] Scoping Plan, of comparison to a 'business-as-usual' projection as a measure of the emission reductions needed to meet the 2020 goal (determined to be a reduction of 29 percent from business as usual)." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 218.) As noted earlier, "the [2008] Scoping Plan forecasted statewide greenhouse gas emissions under a business-as-usual scenario in which no additional regulatory actions were taken to reduce emissions." (*Ibid*.) In the pertinent environmental impact report, the lead agency estimated project emissions at 390,046 metric tons of carbon dioxide equivalent per year " 'if the proposed [p]roject and resulting development were constructed consistent with [the Air Board's] assumptions for the [Air Board's] 2020 . . . [no action taken, or business as usual] scenario.' " (*Ibid*.)

"Because the [lead agency's] estimate of actual annual project emissions . . . [wa]s 31 percent below its business-as-usual estimate . . . , exceeding the Air Board's determination of a 29 percent reduction from business as usual needed statewide, the [lead agency] conclude[d] the project's likely greenhouse gas emissions w[ould] not impede achievement of Assembly Bill 32's goals and [would] therefore [be] less than significant for CEQA purposes." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 218.)

Initially, our Supreme Court addressed "two related aspects of the greenhouse gas problem that inform [the] discussion of CEQA significance." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 219.) "First, because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself. The challenge for CEQA purposes is to determine whether the impact of the project's emissions of greenhouse gases is *cumulatively* considerable, in the sense that 'the incremental effects of [the] individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.' [Citations.] 'With respect to climate change, an individual project's emissions will most likely not have any appreciable impact on the

global problem by themselves, but they will contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the project's incremental addition of greenhouse gases is "cumulatively considerable" in light of the global problem, and thus significant.' [Citation.]

"Second, the global scope of climate change and the fact that carbon dioxide and other greenhouse gases, once released into the atmosphere, are not contained in the local area of their emission means that the impacts to be evaluated are also global rather than local. For many air pollutants, the significance of their environmental impact may depend greatly on *where* they are emitted; for greenhouse gases, it does not. For projects, like . . . residential and commercial development, which are designed to accommodate long-term growth in California's population and economic activity, this fact gives rise to an argument that a certain amount of greenhouse gas emissions is as inevitable as population growth. Under this view, a significance criterion framed in terms of efficiency is superior to a simple numerical threshold because CEQA is not intended as a population control measure." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at pp. 219-220.)

Turning to the merits of the case, our Supreme Court first considered the plaintiffs' contention that the "no significant impact conclusion resulted from use of a legally improper baseline for comparison" because the lead agency determined significance "by comparison to the hypothetical business-as-usual scenario rather than by comparison to existing greenhouse gas emissions on the project site." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at pp. 218-219.) The court concluded the lead agency's choice to use the Assembly Bill 32 goal as the criterion for evaluating the significance of the project's climate change effects did not violate CEQA. (*Center for Biological Diversity*, at p. 223.)

Our Supreme Court next considered whether the lead agency "violated CEQA by comparing the project's expected emissions to a hypothetical business-as-usual scenario rather than to a baseline of emissions in the existing physical environment." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 224.) Our Supreme Court held the lead agency "employ[ed] a hypothetical business-as-usual emissions model merely as a means of comparing the project's projected emissions to the statewide target set under the [2008] Scoping Plan" and "not as a significance baseline." (*Id*. at p. 225.) Our Supreme Court, however, agreed with the plaintiffs that the lead agency "abused its discretion in finding, on the basis of the [environmental impact report's] business-as-usual comparison, that the project's greenhouse gas emissions would have no cumulatively significant impact on the environment" because "the administrative record disclose[d] no substantial evidence that [the] *project-level* reduction of 31 percent in comparison to business as usual [wa]s consistent with achieving Assembly Bill 32's *statewide* goal of a 29 percent reduction from business as usual." (*Ibid*.)

Our Supreme Court explained: "The [2008] Scoping Plan set out a statewide reduction goal and a framework for reaching it—a set of broadly drawn regulatory approaches covering all sectors of the California economy and projected, if implemented and followed, to result in a reduction to 1990-level greenhouse gas emissions by the year 2020. The plan expressed the overall level of conservation and efficiency improvements required as, among other measures, a percentage reduction from a hypothetical scenario in which no additional regulatory actions were taken. But the [2008] Scoping Plan nowhere related that *statewide* level of reduction effort to the percentage of reduction that would or should be required from *individual projects*, and nothing . . . in the administrative record indicate[d] the required percentage reduction from business as usual is the same for an individual project as for the entire state population and economy." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at pp. 225-226.)

Pointing to a letter from the California Attorney General's Office in the administrative record, our Supreme Court noted there was "reason to suspect" that "a greater degree of reduction may be needed from new land use projects than from the economy as a whole" because "[d]esigning new buildings and infrastructure for maximum energy efficiency and renewable energy use is likely to be easier, and is more likely to occur, than achieving the same savings by retrofitting of older structures and systems." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 226.) The court found the lead agency's "responses to comments on the [environmental impact report] d[id] not suffice to demonstrate that a 31 percent reduction from business as usual at the project level corresponds to the statewide reductions called for in the [2008] Scoping Plan." (*Ibid*.) And there was "no expert opinion stating generally that the [2008] Scoping Plan contemplate[d] the same emission reductions from new buildings as from existing ones, or more particularly that the [2008] Scoping Plan's statewide standard of a 29 percent reduction from business as usual applies without modification to a new residential or mixed-use development project." (*Ibid*.)

Our Supreme Court further determined the lead agency made "an unsupported assumption regarding statewide density averages used in the [2008] Scoping Plan, an assumption that if incorrect could result in a misleading business-as-usual comparison." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at pp. 226-227.) The court explained the lead agency's "business-as-usual scenario assume[d] residential density equal to that currently found in the Santa Clarita Valley," whereas "the [2008] Scoping Plan's statewide business-as-usual model is not necessarily based on residential densities equal to the Santa Clarita Valley average." (*Id*. at p. 227.) Nothing in the administrative record showed "the statewide density assumptions used in [the established growth] model [used to develop the business-as-usual projection in the 2008 Scoping Plan] mirror[ed] conditions in the Santa Clarita Valley." (*Ibid.*) The administrative record thus did "not establish a firm ground for the efficiency comparison" in the environmental impact report

and did not "substantially support" the conclusion that the project's greenhouse gas "emissions savings over business as usual satisfie[d] the . . . [2008] Scoping Plan's 29 percent statewide savings" goal. (*Ibid*.)

"At bottom, the [environmental impact report's] deficiency" in *Center for Biological Diversity* "stem[med] from taking a quantitative comparison method developed by the [2008] Scoping Plan as a measure of the greenhouse gas emissions reduction effort required by the state as a whole, and attempting to use that method, without consideration of any changes or adjustments, for a purpose very different from its original design: to measure the efficiency and conservation measures incorporated in a specific land use development proposed for a specific location. The [lead agency] simply assume[d] that the level of effort required in one context, a 29 percent reduction from business as usual statewide, w[ould] suffice in the other, a specific land use development. From the information in the administrative record, [our Supreme Court] c[ould not] say that conclusion [wa]s wrong, but neither c[ould it] discern the contours of a logical argument that it [wa]s right. The analytical gap left by the [lead agency's] failure to establish, through substantial evidence and reasoned explanation, a quantitative equivalence between the [2008] Scoping Plan's statewide comparison and the [environmental impact report's] own project-level comparison deprived the [environmental impact report] of its ' "sufficiency as an informative document." ' " (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 227.)

Our Supreme Court explained, "A lead agency enjoys substantial discretion in its choice of methodology. But when the agency chooses to rely completely on a single quantitative method to justify a no-significance finding, CEQA demands the agency research and document the quantitative parameters essential to that method. Otherwise, decision makers and the public are left with only an unsubstantiated assertion that the impacts—[such as], the cumulative impact of the project on global warming—will not be significant." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 228.)

In that regard, the court addressed potential options for lead agencies "faced with evaluating the cumulative significance of a proposed land use development's greenhouse gas emissions," noting it could not "guarantee that any of these [options] will be found to satisfy CEQA's demands as to any particular project." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at pp. 228-229.) First, "[o]n an examination of the data behind the [2008] Scoping Plan's business-as-usual model, a lead agency might be able to determine what level of reduction from business as usual a new land use development at the proposed location must contribute in order to comply with statewide goals." (*Id*. at p. 229.) Second, "a lead agency might assess consistency with Assembly Bill 32's goal in whole or in part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities." (*Ibid*.)

Third, "a lead agency may rely on existing numerical thresholds of significance for greenhouse gas emissions, though . . . use of such thresholds is not required." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 230.) Our Supreme Court cautioned, however, thresholds "only define the level at which an environmental effect 'normally' is considered significant; they do not relieve the lead agency of its duty to determine the significance of an impact independently." (*Id.* at pp. 230-231.)

In *Golden Door Properties*, the Fourth District Court of Appeal struck down a guidance document adopted by the County of San Diego, which included an efficiency metric of 4.9 metric tons of carbon dioxide equivalent per service population per year for 2020 as a measure to determine the significance of greenhouse gas impacts for development proposals. (*Golden Door Properties*, *supra*, 27 Cal.App.5th at pp. 894-895, 897-898.) The County of San Diego explained the efficiency metric would be used to determine whether a project complied with the greenhouse gas reduction requirements in Assembly Bill 32. (*Golden Door Properties*, at pp. 897-898.)

After concluding the efficiency metric established a threshold of significance (*Golden Door Properties*, *supra*, 27 Cal.App.5th at pp. 901-903), the court explained a

threshold of significance developed in reliance on statewide standards "must be justified by substantial evidence to explain why it is sufficient for use in projects in the County [of San Diego]" (*id.* at pp. 904-905). The County of San Diego argued that because the efficiency metric was based on service population per year, it "supplie[d] San Diego specific data." (*Id*. at p. 905.) The appellate court disagreed, stating, "[T]he service population number relies on statewide service population and [greenhouse gas] inventory data; it does not address the County [of San Diego] specifically, and it does not explain why using statewide data is appropriate for setting the metric for the County [of San Diego]. Additionally, the [e]fficiency [m]etric 'allows the threshold to be applied evenly to most project types,' but it does not account for variations between different types of development; nor does it explain why the per person limit would be appropriately evenly applied despite project differences. Without substantial evidence explaining why statewide [greenhouse gas] reduction levels would be properly used in this context, the County [of San Diego] fail[ed] to comply with CEQA Guidelines." (*Ibid.*)

D

The County's 2011 General Plan Environmental Impact Report

The methodology underlying the greenhouse gas emissions thresholds of significance used by the County in the final report was initially developed and established in an environmental impact report completed in 2011 when the County adopted its updated general plan. In the updated general plan, the County noted "a climate change impact is considered significant if any portion of the [p]roject will significantly hinder attainment of the state's goals to reduce greenhouse gas emissions to 1990 levels by the year 2020." (Sacramento County Dept. of Environmental Review and Assessment, Sacramento County General Plan Update: Final Environmental Impact Report Volume II (Apr. 2010) ch. 12, p. 12-15 (2011 General Plan EIR).)

The County used a model to inventory the estimated greenhouse gas emissions in the County and incorporated cities within the County to develop "a regional picture"

based on 2005 data, or if "unavailable, 2006 or other recent-year data." (2011 General Plan EIR, *supra*, ch. 12, p. 12-15.) The calculated greenhouse gas emissions were divided between residential, commercial, industrial, transportation, off-road vehicle use, waste, wastewater treatment, agriculture, high global warming potential contributors (e.g., refrigerants), and airport sectors. The emissions inventories for the residential, commercial, and industrial sectors were based on energy usage, whereas the emissions inventories for the transportation sector, for example, were based on exhaust emissions. (*Ibid*.)

The County obtained energy use data from the Sacramento Municipal Utility District and Pacific Gas and Electric Company. (2011 General Plan EIR, *supra*, ch. 12, p. 12-15.) The Sacramento Municipal Utility District "reported its 2005 [greenhouse gas] emissions and an emissions factor for all electricity sold to customers that was verified and certified by the California Climate Action Registry. This emissions factor was input into the model as a replacement for the statewide emissions factor for electricity consumption to generate more accurate [greenhouse gas] emissions estimates for Sacramento County electricity consumption. The software default emissions factors for other [greenhouse gases], which is based on statewide averages, were used in all other instances." (*Id*., pp. 12-15 to 12-16.) "The County's 2005 [greenhouse gas] baseline from which [carbon dioxide equivalent] emissions were adjusted was obtained from the County's Greenhouse Gas Inventory completed in 2009." (*Id*., p. 12-16.)

In the "impacts of the project on climate change" (2011 General Plan EIR, *supra*, ch. 12, p. 12-26, boldface & capitalization omitted) section of the document, the County explained the community analysis of the various sectors revealed "transportation accounts for 55 [percent] of emissions, and operation of residential, commercial, and industrial buildings accounts for 28 [percent] of emissions. The industrial-specific, off-road vehicle, waste, wastewater, agriculture, and high global warming potential greenhouse gases . . . sectors combined are responsible for only 14 [percent] of the

County emissions, with the airport as an additional 3 [percent]" (*id*., p. 12-27). The County combined the residential, commercial, and industrial sectors "because though th[o]se sectors operate differently, the source of emissions [is] the same: private building and interior equipment energy usage." (*Ibid*.) The total greenhouse gas emissions among all sectors was estimated to be 6,555,802 metric tons of carbon dioxide equivalent. (*Id*., p. 12-27, table CC-2 [2005 Community Emissions by Sector].)

The County explained that Assembly Bill 32 "requires emissions to be reduced to 1990 levels by the year 2020, which is estimated in the . . . [2008] Scoping Plan to be 15 [percent] below existing (2005) emissions." (2011 General Plan EIR, *supra*, ch. 12, p. 12-28.) Because the 2008 Scoping Plan was "the only regulatory document adopted by the [s]tate that sets a greenhouse gas reduction goal," the County "decided to rely on the underlying strategy and assumptions of the . . . [2008] Scoping Plan to develop County targets." (*Ibid.*, boldface & underlining omitted.) The County "assumed that emissions must be reduced to 1990 levels by 2020" and determined that by "[r]educing the modeled 2005 . . . County emissions by 15 [percent], the County 1990 baseline is 5,572,432 metric tons." (*Ibid*., boldface & underlining omitted.)

The County then established three thresholds of significance for development based on the 2020 emissions reduction goal—one for residential, one for commercial and industrial, and one for transportation. (2011 General Plan EIR, *supra*, ch. 12, p. 12-35.) The County explained, "Each sector 2020 target was derived by using their percent[age] of the 2005 baseline total and multiplying it by the total minimum reduction required (e.g., 1,033,142 [minus] (15.80 [percent multiplied by] 983,370) [equals] the residential sector 2020 target). The targets were derived using housing projections and projections of commercial and industrial square footage provided by the Sacramento Area Council of Governments . . . . Note that for the commercial and industrial sector, the target is reported as being per 1,000 square feet." (*Id*., p. 12-36.)

The County explained the total minimum reduction was "based on the proportion that each sector contributes to emissions (e.g., [c]ommercial/[i]ndustrial emissions are 12.1[percent] of the total 2005 emissions, so that sector is also responsible for 12.1[percent] of the total minimum reduction required: 12.1[percent] [multiplied by] 983,370)."[5] (2011 General Plan EIR, *supra*, ch. 12, p. 12-37, table CC-9.) The adopted thresholds were: 1.30 metric tons of carbon dioxide equivalent emissions per capita for residential; 8.08 metric tons of carbon dioxide equivalent emissions per 1,000 square feet for commercial and industrial; and 4.56 metric tons of carbon dioxide equivalent emissions per capita for transportation. (*Ibid*.) The per capita thresholds were calculated based on 2020 population, commercial square footage, and industrial square footage forecasts provided by the Sacramento Area Council of Governments. (*Id*., p. 12-36.)

By way of example, because total emissions needed to be reduced by 983,370 metric tons of carbon dioxide equivalent to meet the 2020 target, the residential sector was expected to contribute 15.8 percent towards that reduction, or 155,373 metric tons of carbon dioxide equivalent emissions. Subtracting 155,373 from the 2005 residential emissions of 1,003,142 metric tons yielded a 2020 residential target of 877,769 metric tons of carbon dioxide equivalent.

E

The Methodology Used For The Climate Change Significance Thresholds In The Final Report

As noted *ante*, the final report incorporated the 2011 General Plan EIR and the significance thresholds contained therein. Before the County addressed the methodology

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[5] The percentage of total greenhouse gas emissions attributed to the residential sector based on total emissions in 2005 was 15.8 percent, and 55.0 percent was attributed to the transportation sector. (2011 General Plan EIR, *supra*, ch. 12, p. 12-37, table CC-9 [Sector Analysis (in MT) and Thresholds for Development].)

it adopted, it discussed the "state plans, policies, laws, and regulations." (Capitalization & boldface omitted.) The County discussed, among other things, the 2005 Executive Order, Assembly Bill 32, the 2015 Executive Order, Senate Bill 32, and the 2017 Scoping Plan. As to the 2017 Scoping Plan, the County noted the Air Board "identifie[d] how [greenhouse gases] associated with proposed projects could be evaluated under CEQA."

Turning to the methodology, the County wrote: "In line with the thresholds and methods recommended by Sacramento County, the analysis of the . . . [p]roject's operational [greenhouse gas] emissions is divided into two separate emission sectors: [e]nergy [u]se and [t]ransportation." In that regard, the County evaluated the project's greenhouse gas emissions "for a partial buildout scenario in 2020 and a full buildout scenario in 2032." The County explained the 2030 significance thresholds adopted in the final report "reflect[ed] an update to the 2020 thresholds consistent with the reduction target established by [Senate Bill] 32 of 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050, based on the same methodology used to develop the 2020 significance thresholds." (Boldface & underlining omitted.)

The County explained, "The partial buildout scenario includes a [vehicle miles traveled] estimate using a straight-line regression between the existing (i.e., 2015) [vehicle miles traveled] estimate and the full buildout conditions (i.e., 2035) to obtain anticipated [vehicle miles traveled] in 2020. This assumes five years of project development has occurred, or 29 percent of the total project buildout. The amount of residential and nonresidential development that is included in this partial buildout scenario is included in [a table]. The full buildout scenario conservatively assume[d] the 2035 [vehicle miles traveled] conditions in 2032 and all land uses are fully built out. All land uses included in the full buildout scenario [were] also included in [the table]." For housing, the table includes estimates for 2020 and 2035 for the number of units of single-family housing, low-rise apartments, and mid-rise apartments; anticipated population; and acres. For retail and office space, the community center, research and development,

light industrial, and a city park, the County set forth estimates for square footage and acres. For the elementary school, the table includes square footage, total anticipated students, and acreage.

The County next discussed energy use emissions. The County explained the 2020 partial buildout scenario's level of electricity and natural gas consumption were "estimated using default consumption rates in the California Emissions Estimator Model (CalEEMod) Version 2016.3.2" (estimator model) "for the types of land uses included in [the table]." "For the full buildout scenario in 2032, levels of electricity and natural gas consumption were estimated by adjusting the default consumption rates in [the estimator model] for the types of land uses proposed in the [project] based on the anticipated energy consumption reduction determined by [the California Energy Commission] for the 2019 Title 24 Building Energy Efficiency Standards. Single-family housing energy consumption was decreased by 7 percent and nonresidential building energy was reduced by 30 percent to account for efficiency improvement between the 2016 and 2019 Title 24 standards [citation].

"[Greenhouse gas] emissions were estimated for electricity consumption based on [greenhouse gas] emission intensity factors for Sacramento Municipal Utility District . . . and assumed compliance with California's Renewables Portfolio Standard (i.e., 33 percent renewable energy portfolio by 2020 and 60 percent by 2030). The 2019 Title 24 Building Energy Efficiency Standards require single-family housing to generate their electricity demand from renewable sources such as solar photovoltaics. Emissions modeling accounted for solar generation based on the 2019 Title 24 standards in the 2032 full buildout scenario. Assumptions and details regarding the estimated solar generation can be found in Appendix AQ-GHG-1. To estimate [greenhouse gas] emissions associated with natural gas, [the estimator model] default energy usage rates and emission factors were used based on the project's land use types and climate region.

"Emissions from energy consumption were summed separately for residential and nonresidential land uses. [Greenhouse gas] emissions for energy consumption by residential land use (i.e., single- and multifamily units) were normalized by the number of residents that [*sic*] would populate these uses and compared to the County's adopted 2020 threshold of 1.33 annual metric tons of [carbon dioxide equivalent] per capita per year . . . and the County's extrapolated threshold for 2032 of 0.73 [metric tons of carbon dioxide equivalent per capita per year]. [Greenhouse gas] emissions for energy consumption by nonresidential land uses (i.e., commercial center, community center, elementary schools, [e]nvironmental [e]ducation [c]ampus, [r]esearch and [d]evelopment [c]ampus) were normalized by floor area and compared to the County's adopted 2020 threshold of 7.87 [metric tons of carbon dioxide equivalent] per 1,000 square feet of floor area . . . and the County's extrapolated threshold for 2032 of 4.28 [metric tons of carbon dioxide equivalent per 1,000 square feet of floor area]."

Transportation emissions, the County explained, "are associated with the project-generated vehicle trips. Transportation-related emissions were compared to the [vehicle miles traveled] per capita thresholds. For comparison to Sacramento County's per-capita [greenhouse gas] thresholds of significance, the total population served by the project was also estimated.

"Transportation-related emissions were calculated using [vehicle miles traveled] estimates provided by the traffic study of the proposed project [citation]. [Vehicle miles traveled] estimates were provided for existing-plus-project conditions, cumulative-no-project conditions, and cumulative-plus-project conditions. The cumulative scenario includes [vehicle miles traveled] associated with the proposed [project] as well as other large foreseeable development including the NewBridge Specific Plan, Jackson Township, and the West Jackson Highway Master Plan.

"[Greenhouse gas] vehicle emission factors for 2020 and 2032 were obtained from [the Air Board's] Mobile Source EMissions FACtor (EMFAC) 2017 model, version

1.0.2" (mobile source model). "[The mobile source model] was also used to estimate the level of mobile-source [greenhouse gas] emissions that would be generated based on projected [vehicle miles traveled] under the 2020 partial buildout and 2032 full buildout scenarios. Emission rates were used to generate the total [vehicle miles traveled]-related emissions for the project in 2020 and 2032 to be compared to the Sacramento County per-capita thresholds for [vehicle miles traveled]. The population estimates were based on average household sizes for the Sacramento region as reported [by the Sacramento Area Council of Government's Metropolitan Transportation Plan/Sustainable Communities Strategy] for the partial buildout year of 2020 using 2020 estimates and the full buildout year of 2032 using 2036 estimates [citation]."

The next section discussed in the final report pertained to other sectors. The County wrote, "[T]here are several [greenhouse gas] emissions sectors that [are] not included in the County's [greenhouse gas] thresholds, but are quantified in this analysis. This includes [greenhouse gas] emissions associated with area sources, water, and solid waste.

"[Greenhouse gases] from area sources were based on the number of residential units, the size of the nonresidential buildings, and the number of days of landscaping per year (i.e., 180). [Greenhouse gases] from electricity consumption specifically associated with the consumption of water, were based on residential and commercial water demand estimates provided by Sacramento County for the project. [Greenhouse gas] emissions associated with the generation of solid waste were estimated using default parameters in [the estimator model]. While these emission estimates were not part of the comparison to the County's recommended thresholds of significance, they were included in the emissions summary for informational purposes."

In the "impacts and analysis" (boldface & capitalization omitted) section, the County incorporated by reference the Mather Field Project environmental impact report, which "evaluated impacts related to climate change and [greenhouse gas] emissions from

implementation of the Mather Field Project which consisted of a realignment of Zinfandel Drive and trunk extension, creation of the Mather Preserve and the establishment of an [u]rban [d]evelopment [a]rea designation for the Mather South [p]lan [a]rea." The County discussed adopted mitigation measures in the Mather Field Project environmental impact report pertaining to residential and commercial energy sector emission reductions. The County next addressed the impacts determination. The impact analysis was divided into two sections—a 2020 partial buildout scenario and a 2032 full buildout scenario. For each scenario, the County addressed energy-related greenhouse gas emissions from residential land uses, energy-related greenhouse gas emissions from nonresidential land uses, and transportation-related greenhouse gas emissions. The County then provided an emissions total from all sectors for each scenario.

The County determined: "Energy-related emissions associated with the proposed residential land uses would result in 0.52 [metric tons of carbon dioxide equivalent] per capita, which is below the 0.73 [metric tons of carbon dioxide equivalent] per-capita threshold. Energy-related [e]missions from nonresidential land uses would result in 2.28 [metric tons of carbon dioxide equivalent per 1,000 square feet], which is below the 4.28 [metric tons of carbon dioxide equivalent per 1,000 square feet] threshold. There would be a surplus in emissions reductions needed for both the residential and nonresidential sectors, by 1,933 and 2,134 [metric tons of carbon dioxide equivalent per year], respectively. Emissions from project-generated [vehicle miles traveled] in 2032 would result in 2.50 [metric tons of carbon dioxide equivalent] per capita, which is above the 1.47 [metric tons of carbon dioxide equivalent] per-capita threshold. The surplus of emissions reductions from the residential and nonresidential sectors can be applied to [greenhouse gas] emissions reductions needed for the mobile sector. The additional reduction of 4,067 [metric tons of carbon dioxide equivalent per year] would reduce the mobile sector's per capita emissions to 2.05 [metric tons of carbon dioxide equivalent], but would still require an additional reduction of 5,289 [metric tons of carbon dioxide

equivalent per year] to meet the threshold. Even with the additional reductions in [greenhouse gas] emissions from the residential and nonresidential energy sectors, project-generated [greenhouse gas] emissions would exceed applicable Sacramento County thresholds of significance for transportation and result in a cumulatively considerable contribution to climate change. This impact would be potentially significant." The County adopted three mitigation measures. We do not discuss the specifics as to the mitigation measures because they are not pertinent to this appeal.

F

The County's Methodology Differs From The Methodologies Previously Rejected For Lack Of Substantial Evidence

The argument presented by Tsakopoulos to challenge the County's greenhouse gas thresholds of significance is quite narrow. Tsakopoulos argues the County used a methodology in developing the 2032 thresholds of significance that was rejected in *Center for Biological Diversity* and *Golden Door Properties* for lack of substantial evidence. The analysis under substantial evidence review turns on the information contained in the record before us on appeal. The question is thus whether the record establishes the County employed "the same methodology" as and "significance thresholds indistinguishable" from those rejected in *Center of Biological Diversity* and *Golden Door Properties*. The answer is, "no." Because Tsakopoulos's argument is narrow, so is our conclusion.

The County's thresholds of significance are distinguishable from the methodology used by the lead agency in *Center for Biological Diversity* for several reasons. Before we delve into the analysis, however, we find it appropriate to clarify a couple of things regarding our Supreme Court's *Center for Biological Diversity* decision.

First, our Supreme Court did not disapprove of the methodology used by the lead agency in that case because the court disagreed with the methodology itself. Our Supreme Court acknowledged that, "A lead agency enjoys substantial discretion in its

choice of methodology." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 228.) The court concluded the lead agency abused its discretion in adopting the methodology used in that case because there was *no substantial evidence in the record* to support the methodology. (*Id.* at p. 225.) When a court applies the substantial evidence standard of review, the court does not determine whether a different conclusion would have been equally or more reasonable. (*Friant Ranch*, *supra*, 6 Cal.5th at p. 512.) In other words, the court does not substitute its judgment for that of the lead agency.

Second, our Supreme Court did not state that "new land use projects such as th[e] one [at issue] *must* incorporate greater greenhouse gas reductions than from the economy as a whole to achieve the state targets," as Tsakopoulos asserts. (Italics added.) Our Supreme Court instead noted, "The California Attorney General's Office made th[e] point [that 'a greater degree of reduction *may* be needed from new land use projects than from the economy as a whole'] while commenting on an air district's greenhouse gas emissions reduction plan, in a letter one of the plaintiffs brought to [the lead agency's] attention in a comment on the [environmental impact report]" in that case. (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 226, italics added.) Our Supreme Court then noted the lead agency's "responses to comments on the [environmental impact report] do not suffice to demonstrate that a 31 percent reduction from business as usual at the project level corresponds to the statewide reductions called for in the [2008] Scoping Plan" and the plaintiffs thus "put forward one ready *reason to suspect* . . . a greater degree of reduction *may* be needed from land use projects than from the economy as whole." (*Ibid*., italics added.) In other words, our Supreme Court was considering the evidence in the administrative record before it and determined the lead agency's response to the letter did not negate the probative value of the Attorney General's point.

We now turn to the distinctions between this case and *Center for Biological Diversity*. In *Center for Biological Diversity*, the lead agency determined that because the project's estimated greenhouse gas emissions were below the 29 percent reduction

from business as usual needed statewide and would not impede achievement of Assembly Bill 32's goals, the project's impact was less than significant. (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 218.) The lead agency thus "employ[ed] a hypothetical business-as-usual emissions model . . . as a means of comparing the project's projected emissions to the statewide target set under the [2008] Scoping Plan." (*Id.* at p. 225.) Our Supreme Court in summation rejected the methodology because the administrative record did not contain substantial evidence indicating the 2008 Scoping Plan's statewide greenhouse gas reduction goal was "the same for an individual project as for the entire state population and economy." (*Id*. at pp. 225-226.)

Here, the County *did not compare the project's greenhouse gas emissions to the statewide business-as-usual goal*, as the lead agency did in *Center for Biological Diversity*. The County instead developed county-specific thresholds of significance for different sectors and then compared the project's emissions against those numeric thresholds of significance. The use of numerical thresholds of significance was one of the three enumerated options outlined in *Center for Biological Diversity* for assessing the significance of project impacts. (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 230.) The Air Board was aware of and cited to our Supreme Court's *Center for Biological Diversity* opinion when the Air Board adopted the 2017 Scoping Plan. (2017 Scoping Plan, *supra*, ch. 5, p. 101, fn. 251.) Like our Supreme Court, the Air Board sanctioned the use of numerical thresholds of significance to analyze a project's greenhouse gas impacts.

In its 2017 Scoping Plan, the Air Board provided guidance regarding "project-level greenhouse gas emissions reduction actions and thresholds." (2017 Scoping Plan, *supra*, ch. 5, pp. 101-102, capitalization & boldface omitted.) The Air Board stated, "Lead agencies have the discretion to develop evidence-based numeric thresholds (mass emissions, per capita, or per service population) consistent with this Scoping Plan, the [s]tate's long-term [greenhouse gas] goals, and climate change science." (*Id.*, p. 102.) A

couple of pages earlier in the 2017 Scoping Plan, the Air Board further advised local governments on how to adopt local plan greenhouse gas emissions reduction goals. The Air Board wrote, "Since the statewide per capita targets are based on the statewide [greenhouse gas] emissions inventory that includes all emissions sectors in the [s]tate, it is appropriate for local jurisdictions to derive evidence-based local per capita goals based on local emissions sectors and population projections that are consistent with the framework used to develop the statewide per capita targets." (*Id.*, p. 100, fn. omitted.)

In the final report, the County noted the "2017 Scoping Plan . . . identifies how [greenhouse gases] associated with proposed projects could be evaluated under CEQA." In developing the 2032 thresholds of significance, the County used the same framework (but not the same data) that the Air Board used in the 2008 Scoping Plan to calculate the County's 1990 greenhouse gas emission goals. The County relied on "the underlying strategy and assumptions of the . . . [2008] Scoping Plan" but used county-specific emissions inventories, and county-specific population and housing, commercial, and industrial data. Unlike the lead agency in *Center for Biological Diversity*, the County did not use "a quantitative comparison method developed by the [2008] Scoping Plan as a measure of the greenhouse gas emissions reduction effort required by the state as a whole . . . , *without consideration of any changes or adjustments*, . . . to measure the efficiency and conservation measures incorporated in a specific land use development proposed for a specific location." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 227, italics added.)

Not only is the methodology used by the County to establish the thresholds of significance different from the business-as-usual methodology rejected in *Center for Biological Diversity*, the evidence in the administrative record also differs in the two cases. The County presents a seemingly plausible argument that the 2017 Scoping Plan provides substantial evidence to support its thresholds of significance that were developed based on county-specific data. The Air Board is indeed "the state agency

charged with regulating greenhouse gas emissions." (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 215.) Tsakopoulos did not address this argument in its reply brief. We ultimately need not decide whether the 2017 Scoping Plan constitutes substantial evidence to support the County's methodology in establishing the thresholds of significance because Tsakopoulos's challenge is limited to the assertion that the County used *the same methodology* that was rejected in *Center for Biological Diversity*. Clearly, the County did not employ the same methodology. Unlike the lead agency in *Center for Biological Diversity*, the County did not simply assume that "the [2008] Scoping Plan's statewide measure of emissions reduction can also serve as the criterion for an individual land use project." (*Center for Biological Diversity*, at p. 228.)

The thresholds of significance at issue here are also distinguishable from the threshold of significance rejected in *Golden Door Properties*. First, the County did not develop the local thresholds of significance based on *statewide data*. (*Golden Door Properties*, *supra*, 27 Cal.App.5th at p. 905.) The County used county-specific data, as explained *ante*. In *Golden Door Properties*, in contrast, the court found the County of San Diego's "service population number relie[d] on statewide service population and [greenhouse gas] inventory data" and the lead agency failed to "explain why using statewide data [wa]s appropriate for setting the metric for the County [of San Diego]." (*Ibid*.)

Second, the County did not develop a threshold of significance " 'to be applied evenly to most project types,' " as was the case in *Golden Door Properties*. (*Golden Door Properties, LLC*, *supra*, 27 Cal.App.5th at p. 905.) The County developed different county-specific thresholds of significance for different sectors and then compared the estimated greenhouse gas emissions for the project's residential, commercial and industrial, and transportation sectors against those thresholds of significance to evaluate the significance of the project's anticipated emissions. In contrast, in *Golden Door*

Properties, the County of San Diego applied the threshold evenly to most project types, failing to "account for variations between different types of development." (*Ibid*.)

Tsakopoulos has weaved in some additional arguments unrelated to its assertion that the County used the same methodology that was previously rejected in *Center for Biological Diversity* and *Golden Door Properties*. For example, Tsakopoulos argues there is "no evidence justifying the claimed reductions" from the mitigation measures adopted by the County with regard to greenhouse gas emissions reductions. It further appears that Tsakopoulos takes issue with the County's decision not to set thresholds of significance for landscape equipment, waste generation, and water use. We do not address those arguments. The subheadings in Tsakopoulos's opening brief under the heading, "The [final report's] climate change analysis uses a methodology that the California Supreme Court previously recognized is not supported by substantial evidence" are: (1) "The California Legislature established statewide emissions reduction targets through [Assembly Bill] 32 and [Senate Bill] 32"; (2) "[t]he County adopted sector-wide greenhouse gas emissions significance thresholds in 2011 designed to require that projects meet only minimum [Assembly Bill] 32 percentage emissions reductions targets"; (3) "[t]he California Supreme Court in *Center for Biological Diversity* rejected the use of significance thresholds indistinguishable from the County's"; and (4) "[t]he [final report's] analysis of greenhouse gas emissions employs the same methodology the Supreme Court rejected in the *Center of Biological Diversity* case." "Failure to provide proper headings forfeits issues that may be discussed in the brief but are not clearly identified by a heading." (*Pizarro v. Reynoso* (2017) 10 Cal.App.5th 172, 179.)

At bottom, the County's methodology in establishing the thresholds of significance in this case was materially different from the methodologies used in *Center for Biological Diversity* and *Golden Door Properties*. The County's methodology was accordingly not previously rejected by our Supreme Court or the Fourth District Court of Appeal, as Tsakopoulos asserts. Tsakopoulos has thus failed to carry its burden of

proving the County's methodology lacked substantial evidence, and we presume the greenhouse gas emissions analysis in the final report is adequate. (*Concerned Citizens of South Central L.A. v. Los Angeles Unified School Dist.* (1994) 24 Cal.App.4th 826, 836 [" ' "Under CEQA, an [environmental impact report] is presumed adequate [citation], and the plaintiff in a CEQA action has the burden of proving otherwise" ' "].)

II

The Qualitative Analysis Regarding The Construction-related Greenhouse Gas Emissions Is Adequate

Tsakopoulos argues the climate change analysis in the final report is deficient as an informative document because the County failed to assess, examine, and analyze the impacts of the project's construction-related greenhouse gas emissions on climate change. (Citing Guidelines, §§ 15126 ["All phases of a project must be considered when evaluating its impacts on the environment: planning, acquisition, development, and operation"]; 15161 [an environmental impact report "shall examine all phases of the project including planning, construction, and operation"].) We disagree.

The County's discussion of construction-related greenhouse gas emissions was set forth in the significance criteria portion of the climate change chapter in the final report. In that section of the chapter, the County explained: "The issue of global climate change is inherently a cumulative issue, as the [greenhouse gas] emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project's impact to climate change is addressed only as a cumulative impact." As explained *ante*, the County developed certain thresholds of significance for its climate change analysis based on the County's greenhouse gas emissions inventory. The County did not, however, develop a threshold of significance for construction-related greenhouse gas emissions. The County explained, "Emissions resulting from the usage of off-road vehicles is only 4.7 percent of the total inventoried emissions in Sacramento County, which include emissions from recreational and industrial equipment in addition to

construction fleets. Although emissions from the operation of newly constructed buildings adds to existing building stock resulting in a cumulative year-on-year increase in emissions, the level of construction activity required to build the new buildings in a region does not result in a cumulative increase in emissions because of their temporary nature. Though construction activity may increase or decrease in a given year because of market demand, the average amount of construction undertaken does not tend to increase over time, according to historical construction fleet emissions data. For this reason, even without mitigation, the amount of annual emissions resulting from construction is expected to decrease over time as a result of the implementation of existing regulations (such as the [L]ow [C]arbon [F]uel [S]tandard) and improving fuel efficiency. Standard mitigation applied for the purpose of reducing other air pollutants (see Chapter 4 Air Quality) will further reduce [greenhouse gas] emissions. For the foregoing reasons, it was determined that construction emissions would not contribute to a significant climate change impact, and no threshold is necessary."

The County discussed the Low Carbon Fuel Standard in the final report as follows: "In January 2007, [an executive order] established a Low Carbon Fuel Standard . . . . The [executive order] calls for a statewide goal to be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020, and that a [Low Carbon Fuel Standard] for transportation fuels be established for California. The [Low Carbon Fuel Standard] applies to all refiners, blenders, producers, or importers ('[p]roviders') of transportation fuels in California, including fuels used by off-road construction equipment [citation]. The [Low Carbon Fuel Standard] is measured on the total fuel cycle and may be met through market-based methods (e.g., providers exceeding the performance required by [a Low Carbon Fuel Standard] receive credits that may be applied to future obligations or traded to [p]roviders not meeting [the Low Carbon Fuel Standard])."

The administrative record also contains the 2017 Scoping Plan adopted by the Air Board and an e-mail from the Air Board confirming that the Low Carbon Fuel Standard applies to diesel fuel used by off-road construction equipment. In the 2017 Scoping Plan, the Air Board explained that "renewable fuels in the heavy-duty vehicle sector are displacing diesel fossil fuel as quickly as renewable power is replacing fossil fuels on the electricity grid. California's climate policies will also reduce fossil fuel use and decouple the state from volatile global oil prices. [The Air Board's] analyses show fossil fuel demand will decrease by more than 45 percent by 2030, which means Californians will be using less gasoline and diesel resulting in healthier air and cost-savings on transportation fuels." (2017 Scoping Plan, *supra*, Executive Summary, p. ES-8.) The Air Board further wrote, "This Scoping Plan builds on and integrates efforts already underway to reduce the [s]tate's [greenhouse gas], criteria pollutant, and toxic air contaminant emissions. Successful implementation of existing programs has put California on track to achieve the 2020 target. Programs such as the Low Carbon Fuel Standard and Renewables Portfolio Standard are delivering cleaner fuels and energy, the Advanced Clean Cars Program has put more than a quarter million clean vehicles on the road, and the Sustainable Freight Action Plan will result in efficient and cleaner systems to move goods throughout the [s]tate. Enhancing and implementing these ongoing efforts puts California on the path to achieving the 2030 target. This Scoping Plan relies on these, and other, foundational programs paired with an extended, more stringent [c]ap-and-[t]rade [p]rogram, to deliver climate, air quality, and other benefits." (*Id*., ch. 1, p. 1.)

In the air quality chapter of the final report, the County noted, "[A]s construction continues into the future, equipment exhaust emission rates would decrease as newer, more emission-efficient construction equipment replaces older, less efficient equipment," referring the reader to Appendix AQ-GHG-1 (greenhouse gas appendix) for assumptions and modeling inputs. In that chapter, the County imposed a mitigation measure for

"exhaust emission control from diesel powered fleets at a construction site." (Boldface & underlining omitted.) The mitigation measure states California regulations limit idling from both on-road and off-road diesel-powered equipment and the Air Board enforces such idling limitations. The project is required to provide clear signage advising workers at the entrances to the site that regulations require idling time be minimized "by shutting equipment off when not in use or reducing the time of idling to five minutes." The mitigation monitoring and reporting plan contains the same mitigation measure.

Also included as a mitigation measure in the air quality chapter of the final report and the mitigation monitoring and reporting plan is a requirement that construction equipment be maintained in "proper working condition according to manufacturer's specifications" and be checked by a certified mechanic before operation to determine whether it is running in the proper condition.

In the methodology section of the climate change chapter of the final report, the County further stated: "Construction-related emissions are provided in [the greenhouse gas appendix] for informational purposes but are not included in [greenhouse gas] emissions calculations, per Sacramento County guidance. Construction-related [greenhouse gas] emissions are considered to meet County thresholds of significance if operational [greenhouse gas] emissions meet thresholds." The greenhouse gas appendix consists of 528 pages. The appendix describes, among other things, the project components and the four phases in which construction of the project is anticipated to occur, and then sets forth the anticipated metric tons of carbon dioxide equivalent construction-related emissions for each year in each phase of construction.

We disagree with Tsakopoulos's assertion that the County failed to assess and analyze the impacts from construction-related greenhouse gas emissions. The County calculated and presented the project's anticipated greenhouse gas emissions from construction-related activities for each year in the greenhouse gas appendix. Consistent with *Center for Biological Diversity*, the County explained that construction-related

greenhouse gas emissions are analyzed on a cumulative basis. (*Center for Biological Diversity*, *supra*, 62 Cal.4th at p. 219 ["The challenge for CEQA purposes is to determine whether the impact of the project's emissions of greenhouse gases is *cumulatively* considerable, in the sense that 'the incremental effects of [the] individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects' "].) "[A] cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the [environmental impact report] together with other projects causing related impacts." (Guidelines, § 15130, subd. (a)(1).)

The County explained emissions from off-road vehicles total less than five percent of the total emissions in the County, with emissions from construction fleets constituting only a portion of those emissions. As the trial court noted, one can reasonably infer "[g]reenhouse gas emissions from construction equipment used for one project would thus be far below that already low percentage." The County next explained the emissions from construction fleets are temporary in the sense that construction fleets are not a continuously emitting source. In other words, construction fleets emit only when they are in use; once the project is constructed, there are no further construction-related emissions. In that regard, the County determined that cumulatively, based on its historical construction fleet emissions data, the average amount of construction does not increase over time.[6] Given the implementation of existing regulations such as the Low Carbon Fuel Standard, improved fuel efficiency, the replacement of older construction equipment with more emission-efficient construction equipment, limitations on idling time, onsite

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[6] Tsakopoulos asserts this claim is not "backed by evidence" in the final report or the administrative record. Tsakopoulos presents no reasoned argument in that regard and does not argue that source materials have to be incorporated into or appended to an environmental impact report.

exhaust control practices, and ensuring construction equipment is maintained in proper working condition, the County concluded the project's construction-related greenhouse gas emissions "would not contribute to a significant climate change impact."

The 2017 Scoping Plan supports this conclusion. Therein, the Air Board estimated fossil fuel demand would decrease by more than 45 percent by 2030 and stated programs like the Low Carbon Fuel Standard and the Renewables Portfolio Standard are delivering cleaner fuels and energy. (2017 Scoping Plan, *supra*, Executive Summary, p. ES-8; *id*., ch. 1, p. 1.) The e-mail from the Air Board further clarifies that the Low Carbon Fuel Standard applies to diesel fuel used by off-road construction equipment. We cannot say that the County's determination that the project's construction-related emissions are not cumulatively considerable is inadequate as a matter of law. (See *Friant Ranch*, *supra*, 6 Cal.5th at pp. 513-516 [adequacy of an environmental impact report as an informational document is subject to a court's independent review].) Tsakopoulos has presented no evidence in the administrative record to suggest that the Low Carbon Fuel Standard and the implementation of the other mitigation measures will not reduce construction-related emissions, as the County determined.

We disagree with Tsakopoulos's assertion that, "even in just quantifying construction related greenhouse gas emissions, the [final report] offers no meaningful information." The greenhouse gas appendix sets forth the estimated construction-related greenhouse gas emissions over the four construction phases, breaking it down by year. The appendix shows the estimated emissions for each year are the following in metric tons of carbon dioxide equivalent: 2019 - 1,566.4; 2020 - 2,221.2; 2021 - 2,171.5; 2022 - 1,293.3; 2023 - 1,098; 2024 - 1,290.8; 2025 - 904.8; 2026 - 1,774; 2027 - 2,274.5; 2028 - 1574.6; 2029 - 1,162.5; 2030 - 1,576; 2031 - 1,560.7; and 2032 - 975.5. In comparison, the County estimated that, upon buildout, the annual residential greenhouse gas emissions will be 4,726 metric tons of carbon dioxide equivalent per year, the annual nonresidential greenhouse gas emissions will be 1,827 metric tons of carbon dioxide equivalent per

year, and the transportation-related greenhouse gas emissions will be 22,766 metric tons of carbon dioxide equivalent per year. The final report is informative as to the level of emissions expected from construction-related activities and provides the public with the ability to compare those numbers against the greenhouse gas emissions expected upon project build out.

Tsakopoulos argues the County's analysis is at odds with its statements regarding the analysis required for construction-related greenhouse gas emissions in the 2011 General Plan EIR. In the 2011 General Plan EIR, the County wrote: "For construction equipment, reductions will be required by the County. There are established and reasonable methods available to calculate construction equipment emissions from a given project, and there are also reasonable means to offset those emissions available. Construction equipment emissions will need to be addressed on a per-project basis, according to the size of the site, the type of development proposed, and the type of equipment that will be used." (2011 General Plan EIR, *supra*, ch. 12, p. 12-36.) It further provided: "Development projects will be required to reduce emissions from construction equipment, but that will need to be determined on a per-project basis, depending on the size of the site and the number and type of equipment that will be used." (*Id*., p. 12-37, table CC-9.) We do not perceive the County's analysis in the final report to be at odds with the 2011 General Plan EIR.

The County calculated the estimated construction-related greenhouse gas emissions for the project and explained the construction-related greenhouse gas emissions would be reduced through compliance with the Low Carbon Fuel Standard and implementation of other mitigation measures adopted in the air quality portion of the final report. The County thus determined that the Low Carbon Fuel Standard and other mitigation measures constitute reasonable means to offset the construction-related greenhouse gas emissions.

As noted *ante*, Guidelines section 15064.4, subdivision (a) provides, "A lead agency shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to: [¶] (1) Quantify greenhouse gas emissions resulting from a project; and/or [¶] (2) [r]ely on a qualitative analysis or performance based standards." It further provides the "agency should consider the following factors, among others, when determining the significance of impacts from greenhouse gas emissions on the environment: [¶] (1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting; [¶] (2) [w]hether the project emissions exceed a threshold of significance that the lead agency determines applies to the project[; and] [¶] (3) [t]he extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions." (*Id*., subd. (b).) The County complied with the Guidelines and Tsakopoulos presents no credible argument to the contrary.

Finally, Tsakopoulos argues there is no "justification for ignoring construction greenhouse gas emissions in the [final report's] mitigation measures." In Tsakopoulos's view, "At the very least, the [final report] should have included in [m]itigation [m]easure CC-3 the amount of construction emissions it quantified when it calculated the carbon credits needed to compensate for the Project's excess emissions." In that mitigation measure, the County required the purchase of carbon offsets for greenhouse gas emissions that exceed the transportation emissions threshold of significance "for the lifetime of the project (i.e., 25 years)." We find no merit in this argument. First, we have found no merit in Tsakopoulos's challenge to the County's qualitative analysis in determining the construction-related greenhouse gas emissions are not cumulatively considerable. Thus, no mitigation was required. Second, we agree with the County that

Tsakopoulos "mixes apples and oranges" because the mitigation measure "only applies to [e]missions that occur every year over the life of the [p]roject."

For the foregoing reasons, we reject Tsakopoulos's argument that the County's analysis of the project's construction-related emissions was deficient.

III

The County Did Not Fail To Analyze Human Health Impacts

CEQA requires disclosure of a project's direct and cumulative environmental effects, among other things, "on human beings, either directly or indirectly." (§ 21083, subd. (b)(3).) Tsakopoulos argues the County "failed to analyze the human health impacts associated with the [p]roject's significant and unavoidable impacts from criteria pollutants," as required by *Friant Ranch*. (Boldface omitted.) We disagree.

We first deny Tsakopoulos's request for judicial notice, then discuss our Supreme Court's *Friant Ranch* decision, and finally conclude the final report and supporting administrative record provided sufficient information to advise the public as to why the County was unable to correlate the project's criteria pollutant emissions to human health impacts.

A

Tsakopoulos's Request For Judicial Notice Is Denied

As in the trial court, Tsakopoulos asks this court to take judicial notice of Sacramento Metro Air Quality Management District's (Air District) "draft 'Guidance to Address the *Friant Ranch* Ruling For CEQA Projects In The Sac Metro Air District' dated December 2019" and the newsletter to which the document was attached. (Some capitalization omitted, italics added.) Tsakopoulos asserts the documents are subject to judicial notice under: (1) Evidence Code section 452, subdivision (c) "because it is an official act of an executive department agency of the State of California . . . and part of the records and files of a state administrative agency"; (2) Evidence Code section 452, subdivision (h) "because its veracity is not reasonably subject to dispute and is capable of

immediate and accurate determination by resort to sources of reasonably indisputable accuracy"; and (3) Evidence Code section 453, which provides, " '[T]he trial court shall take judicial notice of any matter specified in [Evidence Code s]ection 452 if a party requests it and: (a) [g]ives each adverse party sufficient notice of the request, through the pleadings or otherwise, to enable such adverse parties to prepare to meet the request; and (b) furnishes the Court with sufficient information to enable it to take judicial notice of the matter.' " Tsakopoulos argues that "[w]hile [the document was] still in draft form when the [final report] was certified, the guidance document provided a wealth of information the County could have used to assess and disclose the [p]roject's impacts on human health."

We decline to take judicial notice of the document. "[T]he law generally applicable to traditional mandamus actions challenging quasi-legislative administrative decisions" applies equally to CEQA cases. (*Western States Petroleum Assn. v. Superior Court* (1995) 9 Cal.4th 559, 575; *id*. at p. 574.) " ' "The general rule" ' in [administrative mandamus] actions is that judicial review ' "is conducted solely on the record of the proceeding before the administrative agency" ' " and "[a] reviewing court may receive additional evidence only if that evidence 'in the exercise of reasonable diligence, could not have been produced or . . . was improperly excluded at the hearing before' the administrative agency." (*Sierra Club v. California Coastal Com.* (2005) 35 Cal.4th 839, 863.) Tsakopoulos has made no attempt to show the exception to the general rule applies here. We thus confine our review to the administrative record.

B

The Friant Ranch *Decision*

Tsakopoulos believes the final report suffers from the same deficiencies as the environmental impact report in *Friant Ranch* because "the County failed to make a 'reasonable effort' to quantify or explain how the significant and unavoidable impacts from criteria pollutants to be caused by long-term [p]roject operations would impact

human health." To set the issue up for analysis, we first summarize our Supreme Court's *Friant Ranch* decision.

In *Friant Ranch*, our Supreme Court found inadequate the County of Fresno's discussion regarding the public health impacts associated with air pollutants that the project was expected to generate. (*Friant Ranch*, *supra*, 6 Cal.5th at p. 519.) In that environmental impact report, the County of Fresno laid out the estimated " 'long-term area and operational emissions' " at build out for particulate matter 10 microns in diameter or smaller, reactive organic gases, and nitrogen oxides. (*Id*. at p. 517.) The County of Fresno explained the estimated emissions were substantially greater than the thresholds of significance for each of those categories and the " 'air pollutants would have a significant adverse effect on air quality.' " (*Ibid*.) The County of Fresno provided background information about ozone and particulate matter 10 microns in diameter or smaller and " 'a paragraph about the adverse health effects associated with the pollutant.' " (*Ibid*.) " 'The discussion of the adverse health effects, however, was not connected to the levels of the pollutant that would be emitted by the completed project. Instead, the discussion of adverse health effects was general in nature." (*Ibid.*)

Our Supreme Court found this analysis inadequate. The court noted, "The [environmental impact report] does include some discussion of the health impacts of various pollutants and attempts to provide an explanation for its lack of specificity. It offers a general discussion of adverse health effects associated with certain [p]roject-related pollutants. Notably, it also recognized that the County [of Fresno] suffers from the 'most severe' ozone problems in the state and acknowledged the relationship between adverse ambient air quality and certain health risks to the respiratory system that could affect asthmatics, children, and healthy adults. These adverse effects, the draft [environmental impact report] observed, could include 'breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, alterations to the immune system, carcinogenesis, and premature death.' The [environmental impact

report] explained, however, that a more detailed analysis of health impacts [wa]s not possible at this early planning phase. According to the [environmental impact report], '[h]ealth [r]isk [a]ssessments are typically prepared for inclusion in development specific project [environmental impact reports] when certain types of development commonly known to have the potential to result in a human health risk are being proposed (automobile fueling stations [for example]). Due to the broad nature of the planning approvals analyzed in this [environmental impact report], it [wa]s not possible to conduct a human health risk assessment based on specific proposed uses at specific locations within the boundaries of the [p]roject [a]rea because such specific information has not been determined.' " (*Friant Ranch*, *supra*, 6 Cal.5th at p. 519.)

Our Supreme Court found the analysis inadequate because, "Although the [environmental impact report] generally outline[d] some of the unhealthy symptoms associated with exposure to various pollutants, it d[id] not give any sense of the nature and magnitude of the 'health and safety problems caused by the physical changes' resulting from the [p]roject as required by the CEQA guidelines." (*Friant Ranch*, *supra*, 6 Cal.5th at p. 522.) The court acknowledged, "Perhaps it was not possible to do more," but explained, "even in that case, [it] would have found the [environmental impact report] insufficient because it failed to explain why it was not feasible to provide an analysis that connected the air quality effects to human health consequences." (*Ibid*.) The court held, "The [environmental impact report] must provide an adequate analysis to inform the public how its bare numbers translate to create potential adverse impacts or it must adequately explain what the agency *does* know and why, given existing scientific constraints, it cannot translate potential health impacts further." (*Id*. at p. 521.)

C

The Record Discloses Why It Was Not Feasible For The County To Correlate The Project's Emissions With Specific Human Health Impacts

Tsakopoulos believes the final report inadequately analyzes the human health impacts associated with the project's impacts from criteria pollutants because the County failed to " 'explain why' " it could not provide that analysis " 'in a manner reasonably calculated to inform the public of the scope of what is and what is not yet known about the [p]roject's impacts.' " (Quoting *Friant Ranch*, *supra*, 6 Cal.5th at p. 520.) We disagree.

In the final report, the County discussed acute health effects associated with exposure to ozone, nitrogen dioxide, and respirable particulate matter with an aerodynamic diameter of 10 micrometers or less. As to ozone, the County wrote, "Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and possibility of permanent lung impairment [citation]. Emissions of the ozone precursors [reactive organic cases] and [oxides of nitrogen] have decreased over the past two decades across California because of more stringent motor vehicle standards and cleaner burning fuels [citation]." As to nitrogen dioxide, the County wrote, "Acute health effects of exposure to [nitrogen dioxide] include[] coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis, or pulmonary edema, breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, and death. Chronic health effects include chronic bronchitis and decreased lung function [citation]." Finally, as to particulate matter, the County wrote, "Acute health effects of [respirable particulate matter with an aerodynamic diameter of 10 micrometers or less] exposure include breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, and premature death.

Chronic health effects include alterations to the immune system and carcinogenesis [citation]."

Further, in the section where the County addressed the methodology underlying its air quality analysis, the County discussed our Supreme Court's decision in *Friant Ranch*.[7] The final report states: "The case reviewed the long-term, regional air quality analysis contained in the [environmental impact report] for the proposed Friant Ranch project. . . . The [c]ourt ruled that the air quality analysis failed to adequately disclose the nature and magnitude of long-term air quality impacts from emissions of criteria pollutants and precursors 'in sufficient detail to enable those who did not participate in its preparation to understand and consider meaningfully the issues the proposed project raises.' The [c]ourt noted that the air quality analysis did not provide a discussion of the foreseeable adverse effects of project-generated emissions on Fresno County's likelihood of exceeding the [national ambient air quality standards] and [California ambient air quality standards] for criteria air pollutants nor did it explain a connection between the project's emissions and deleterious health impacts. Moreover, as noted by the [c]ourt, the [environmental impact report] did not explain why it was not 'scientifically possible' to determine such a connection. The [c]ourt concluded that 'because the [environmental impact report] as written makes it impossible for the public to translate the bare numbers provided into adverse health impacts or to understand why such translation is not possible at this time,' the [environmental impact report's] discussion of air quality impacts was inadequate. In response to the *Friant Ranch* [d]ecision, this analysis adheres to [the Air District's] Friant Ranch Interim Recommendation, which serves as the district's

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[7] The final report erroneously cited to the appellate court's decision in that case—i.e., *Sierra Club v. County of Fresno* (2014) 226 Cal.App.4th 704—that was affirmed in part and reversed in part by *Friant Ranch*, *supra*, 6 Cal.5th 502. The discussion, however, pertained to our Supreme Court's decision in *Friant Ranch*.

temporary guidance until a final methodology has been developed and approved [citation]. At the time of writing th[e] [final report], [the Air District] ha[d] not adopted a permanent guidance document; however, it [wa]s reasonably foreseeable that [the Air District] could release such guidance in early 2020. A discussion or explanation of how this analysis considers this court guidance is provided below." (Boldface & underlining omitted, italics added & omitted.)

The County subsequently provided a summary of common air quality modeling tools and programs, "[c]onsistent with [the Air District's] Friant Ranch Interim Recommendation." (Italics omitted.) The County identified various models and tools that were "considered but dismissed from use in the analysis." The County explained, "OFFROAD, a model developed by [the Air Board] to evaluate emissions from off-road sources, was not used in this analysis because it is not comprehensive and lacks emissions forecasts for certain types of equipment that would be in use with the [p]roject. As such, it would not provide a reasonable evaluation of [p]roject impacts. [The United States Environmental Protection Agency's] AERMOD was not used because it is best suited to model the movement of plumes from stationary sources, which the [p]roject does not include. [The Air Board's Hotspots Analysis and Reporting Program] was not used for the valuation of the [p]roject's criteria air pollutants—the pollutants of consideration in the *Friant Ranch* [d]ecision—because it is best suited to estimate health impacts of [toxic air contaminants] exposure from stationary sources.

"[The compressive air quality model] was not used in the analysis because it is more applicable to the modeling of emissions on a regional scale (e.g., city, county, multicounty, air basin) rather than at the project level. Additionally, while [the compressive air quality model] may be capable of tracking emission dispersal, the vulnerability of populations is based on individual factors such as life stage (i.e., infants, children, and older persons are more sensitive), preexisting cardiovascular or respiratory disease, and genetic polymorphisms. These data are unavailable; therefore, the degree

and magnitude of resulting health impacts from exposure to air pollution is unknown. As such, the magnitude of health impacts cannot be confidently estimated and [the compressive air quality model] was not used." (Boldface & underlining omitted, italics added.)

The Air District's Friant Ranch Interim Recommendation (Recommendation) cited and relied upon by the County in the final report is part of the administrative record. The Recommendation provides: "The [Air District] does not currently have a methodology that would correlate the expected air quality emissions of projects to the likely health consequences of the increased emissions. The [Air District] is in the process of developing a methodology to assess these impacts, and anticipates releasing it in the fall of 2019. In the interim, agencies should follow the *Friant* [*Ranch*] [c]ourt's advice to explain in meaningful detail why this analysis is not yet feasible." (Italics added.) It continues, "Because of the complexity of ozone formation, the pounds or tons of emissions from a proposed project in a specific geographical location do[] not equate to a specific concentration of ozone formation in a given area, because in addition to emission levels, ozone formation is affected by atmospheric chemistry, geography, and weather. Secondary formation of particulate matter is very similar to the complexity of ozone formation, and localized impacts of directly emitted particulate matter do not always equate to local particulate matter concentrations due to transport of emissions. The analysis should explain that because air district attainment plans and supporting air model tools are regional in nature, they do not allow for analysis of the health impacts of specific projects on any given geographic location."

The local air district explained, "CEQA thresholds are a tool [the Air District] uses to obtain emission reductions from development projects to support attainment of the [f]ederal and [s]tate ambient air quality standards. This protects public health in the overall region, but there is currently no methodology to determine the impact of emissions on concentration levels in specific geographic areas." The Air District

recommended that the lead agency consider the application of various tools and explain why those tools are not useful in assessing specific health impacts of a project. The Air District further noted, "[N]either [it] nor any other air district currently have methodologies that would provide [l]ead [a]gencies and CEQA practitioners with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions." It did, however, advise: "There is an array of information on health impacts related to exposure to ozone and particulate matter emissions published by the [United States Environmental Protection Agency] and the California Air Resources Board. Health studies are used by these agencies to set the [f]ederal and [s]tate ambient air quality standards. A more general discussion of health impacts related to air pollution is also available on www.sparetheair.com and in the [Air District's] Guide to Air Quality Assessment in Sacramento County. None of the health-related information can be directly correlated to the pounds/day or tons/year of emissions estimated from a single, proposed project." (Italics & fns. omitted.) The Air District wrote that the Recommendation was intended "to assist lead agencies and practitioners with CEQA document preparation until [it] develops a methodology that provides a consistent, reliable and meaningful analysis to address the [c]ourt's direction on correlating health impacts to a project's emissions."

Taken together, the County's discussion in the final report and the information contained in the Recommendation upon which it relied provided the public with an explanation for the lack of specificity in correlating potential health impacts with the project's estimated emissions. The County discussed the general acute health effects associated with exposure to ozone, nitrogen dioxide, and respirable particulate matter with an aerodynamic diameter of 10 micrometers or less, citing to information gathered from the United States Environmental Protection Agency and the Air Board. The County then explained it was adhering to the Recommendation in response to the *Friant Ranch* decision, in which our Supreme Court "concluded that 'because the [environmental

impact report] as written makes it impossible for the public to translate the bare numbers provided into adverse health impacts or to understand why such translation is not possible at this time,' the [environmental impact report's] discussion of air quality impacts was inadequate." (Boldface & underlining omitted.)

In the Recommendation, the Air District explained the complexity associated with ozone and particulate matter formation and "that because air district attainment plans and supporting air model tools are regional in nature, they do not allow for analysis of the health impacts of specific projects on any given geographic location." The Air District further explained "there is currently no methodology to determine the impact of emissions on concentration levels in specific geographic areas" and "[n]one of the health-related information can be directly correlated to the pounds/day or tons/year of emissions estimated from a single, proposed project." The Air District recommended that the lead agency consider the application of various tools and explain why those tools are not useful in assessing specific health impacts of a project. The County did so. It explained why different models and tools were dismissed from use in the analysis because they could not assist in analyzing the impacts.

This information was sufficient to inform the public "why it was not feasible to provide an analysis that connected the air quality effects to human health consequences" (*Friant Ranch*, *supra*, 6 Cal.5th at p. 522) and "what the agency *d*[*id*] know and why, given existing scientific constraints, it c[ould not] translate potential health impacts further" (*id*. at p. 521). The discussion of the project's air quality impacts was thus legally adequate.

Tsakopoulos asserts the County "d[id] not analyze other modeling tools that may be available to the County." But Tsakopoulos has identified *no other particular model* that the County could have considered. Nor did Tsakopoulos submit evidence during the administrative process to show that any other pertinent model exists.

Tsakopoulos further argues the Recommendation is insufficient to provide the public with pertinent information regarding the inability to correlate the level of emissions to health impacts because "although the [County] here purported to provide a discussion of the reasons emissions could not be correlated with health effects [citation], the record nonetheless demonstrates otherwise, as Tsakopoulos showed in [its] [o]pening [b]rief." Nothing in Tsakopoulos's brief demonstrates that the County could have correlated emissions with health effects. Tsakopoulos merely asserts the County could have used some of the rejected models because the models did not need to provide scientific certainty. We decline to substitute our judgment for that of the lead agency; the County sufficiently explained why it did not use the various models and tools. Tsakopoulos's assertions to the contrary are speculative. We further disregard the citations in a footnote in Tsakopoulos's opening brief to documents purportedly available on the United States Environmental Protection Agency's and the Centers for Disease Control and Prevention's websites. As explained *ante*, our review is based on the documents in the administrative record.

For the foregoing reasons, we conclude the County complied with *Friant Ranch* in explaining why it could not correlate the project's estimated emissions with potential health impacts.

DISPOSITION

The judgment is affirmed. Respondents shall recover their costs on appeal. (Cal. Rules of Court, rule 8.278(a)(1)-(2).)

/s/
ROBIE, Acting P. J.

We concur:

/s/
MAURO, J.

/s/
RENNER, J.